



Maintenance Solutions

Brute

High Acid Emulsion Bowl Cleaner



For Use On:

Toilets
Porcelain

Urinals

DESCRIPTION

A high acid cleaner formulated to remove scale, rust and hard water deposits, from toilet bowls and urinals. Contains 24% inhibited hydrochloric acid and specially selected detergents to quickly and completely attack the most stubborn deposits. The special inhibitors protect plumbing, once soils are flushed away.

DIRECTIONS

FOR INSIDE OF TOILET BOWLS AND URINALS ONLY.

DO NOT USE ON MARBLE, TERRAZZO, STAINLESS STEEL, CHROME, ALUMINUM OR PLASTICS. SPOT TEST ON UNKNOWN SURFACES.

FOR CLEANING TOILET BOWLS & URINALS: Flush toilet and use swab mop to push water from the bowl over trap. Press swab mop against bowl to remove excess water, then saturate mop with bowl cleaner while holding bottle and applicator over bowl. Swab bowl or urinal completely making sure to get under the rim. Let stand for 10 minutes then flush. Rinse applicator completely.

WEAR RUBBER GLOVES AND GOGGLES OR FACE SHIELD AT ALL TIMES.

PRODUCT SPECIFICATIONS

Acid Content:	24%	Rust Removal:	Excellent
Color:	Opaque	Detergency:	Good
Odor:	Acidic	Rinsability:	Good
Base:	Hydrochloric acid	Flash Point:	None (waterbased)
pH:	<1	Biodegradability:	Complete
Viscosity:	Water thin	Storage/Stability:	2 years
Foam:	Moderate	Weight per Gallon:	9.18 lbs./gal.
Abrasives:	None	Freeze / Thaw Stability:	Keep from freezing

Restroom Cleaners

SAFETY DATA SHEET

Date Prepared : 12/11/2014

SDS No : BRU

Brute

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Brute

GENERAL USE: Clean and remove lime scale and rust from toilets and urinals.

PRODUCT DESCRIPTION: High Acid Bowl Cleaner

PRODUCT CODE: BRU

CHEMICAL FAMILY: Hydrochloric Acid/detergent blend

MANUFACTURER

MISCO Products Corporation

1048 Stinson Drive

Reading, PA 19605

Emergency Phone: 610-926-4106

Customer Service: 800-548-4568

Transportation: 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924

POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1

Eye Corrosion, Category 1

Acute Toxicity (Oral), Category 4

Target Organ Toxicity (Single exposure), Category 3, Respiratory tract irritation

Physical:

Corrosive to Metals, Category 1

GHS LABEL



Corrosion



Exclamation
mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage.

H302: Harmful if swallowed.

H335: May cause respiratory irritation.

H290: May be corrosive to metals.

PRECAUTIONARY STATEMENT(S)

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P260: Do not breathe fumes, gas, mist, vapors or spray.

P270: Do not eat, drink or smoke when using this product.

P264: Wash hands thoroughly after handling.

P234: Keep only in original packaging.

P102: Keep out of reach of children.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P363: Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor/physician.
P390: Absorb spillage to prevent material damage.

Storage:

P405: Store locked up.
P403: Store in a well-ventilated place.
P233: Keep container tightly closed.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White opaque liquid

IMMEDIATE CONCERNS: Causes irreversible eye damage and skin burns.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to the eyes and may cause severe damage including blindness.

SKIN: Corrosive, causes skin burning.

SKIN ABSORPTION: Harmful if absorbed through skin.

INGESTION: Harmful if swallowed.

INHALATION: Vapors are irritating to eyes and respiratory tract.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.

CARCINOGENICITY: None known.

MUTAGENICITY: None known.

ROUTES OF ENTRY: Eye, skin, ingestion, Inhalation.

TARGET ORGAN STATEMENT: Respiratory tract.

CANCER STATEMENT: NA = Not Applicable

WARNING CAUTION LABELS: Corrosive

PHYSICAL HAZARDS: May be corrosive to certain metals.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Hydrochloric acid	22 - 24	7647-01-0
Lauramine oxide	0 - 2	1643-20-5
Alcohol ethoxylate	0 - 2	68131-39-5
Water	70 - 75	7732-18-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advice if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe burning sensation, damage marked by burns.

SKIN: Burning sensation, redness, swelling and possible blistering.

SKIN ABSORPTION: Not Established

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

ACUTE TOXICITY: Corrosive to eyes and skin. Harmful if inhaled. Harmful if swallowed

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: None

EXTINGUISHING MEDIA: Not required.

EXPLOSION HAZARDS: None

FIRE FIGHTING PROCEDURES: Use an extinguishing agent suitable for surrounding fire.

HAZARDOUS DECOMPOSITION PRODUCTS: None Expected.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

AIR SPILL: NA = Not Applicable

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

RELEASE NOTES: Product is harmful to aquatic life.

SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.

HANDLING: Wear chemical resistant rubber or neoprene gloves and eye safety goggles/full face shield when handling.

STORAGE: Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store product away from food and water sources. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

STORAGE TEMPERATURE: Store at ambient temperatures.

STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Hydrochloric acid	TWA	5 ppm		2 ppm		NL	NL
	STEL					NL	NL

ENGINEERING CONTROLS: Use in well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles and full face-shield.

SKIN: Rubber or other chemical resistant gloves.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

PROTECTIVE CLOTHING: NA = Not Applicable

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Pungent

ODOR THRESHOLD: Not Established

COLOR: White emulsion

pH: < 1.0

PERCENT VOLATILE: >90

FLASH POINT AND METHOD: None

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: ~ 140 mm Hg at (68°F)

VAPOR DENSITY: > 1 Air = 1

BOILING POINT: 212° F; 100° C

FREEZING POINT: 32° F; 0° C

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Complete

EVAPORATION RATE: (Water =1) 1.0

DENSITY: 9.13 at 20°C (68°F)

SPECIFIC GRAVITY: 1.175 grams/ml. at 20°C (68°F)

VISCOSITY: Water thin.

(VOC): None

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable under normal storage and use conditions.

CONDITIONS TO AVOID: Do not mix with other chemicals.

POSSIBILITY OF HAZARDOUS REACTIONS: Reacts violently with strong alkaline materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

INCOMPATIBLE MATERIALS: Strong alkalis, reducing agents, chlorine bleach products; metals e.g. aluminum, brass, copper, iron.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	INHALATION LC ₅₀ (rat)
Hydrochloric acid	900 mg/kg (rat)	2134 mg/l (Rat), Aerosol

EYES: Not Established

DERMAL LD₅₀: Not Established

ORAL LD₅₀: Not Established

EYE EFFECTS: Corrosive to eyes. Permanent damage may occur.

SKIN EFFECTS: Corrosive to skin.

CARCINOGENICITY

IARC: No products were found.

CORROSIVITY: Corrosive

GENETIC EFFECTS: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: Vapors may harm respiratory tract.

TERATOGENIC EFFECTS: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Toxic to aquatic life.

ECOTOXICOLOGICAL INFORMATION: This material may be toxic to aquatic life.

BIOACCUMULATION/ACCUMULATION: Not Established

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 282 mg/l, Mosquito fish (*Gambusia affinis*)

CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of corrosivity as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Compound, Cleaning Liquid

TECHNICAL NAME: Hydrochloric Acid Solution

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 1760

PACKING GROUP: III

PLACARDS: Corrosive

LABEL: Certain package sizes determine the proper labeling of containers. Consult manufacturer for specific information regarding proper labeling.

OTHER SHIPPING INFORMATION: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

U.S. CUSTOMS HARMONIZATION NUMBER: 3808.94.0000

SPECIAL SHIPPING NOTES: Quantities less than or equal to one (1) gallon = Limited Quantity not regulated.

AIR (ICAO/IATA)

SHIPPING NAME: Contact manufacturer for more information.

VESSEL (IMO/IMDG)

SHIPPING NAME: Contact manufacturer for more information.

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive



Limited
Quantity
Ground

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** No

313 REPORTABLE INGREDIENTS: No listed substance

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt. %	CERCLA RQ
Hydrochloric acid	22 - 24	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Hydrochloric acid	Massachusetts Right to Know Substance New Jersey Right To Know Substance New York Right to Know Substance Pennsylvania Right to Know Substance Rhode Island Right to Know Substance

CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

16. OTHER INFORMATION

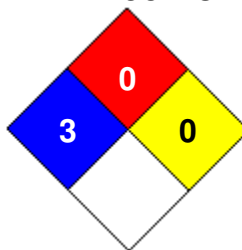
PREPARED BY: Regulatory Affairs Department

Date Prepared: 12/11/2014

HMIS RATING

HEALTH		3
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		D

NFPA CODES



MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.

SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION

Supplier Name:

Misco Products Corporation

Supplier's Address:

1048 Stinson Drive Reading, PA 19605

Supplier's Phone #: (610) 926-4106

Product Name: Brute

Generic Name: High Acid Emulsion Bowl Cleaner

Chemical Family: Hydrochloric Acid/Detergent Blend

Formula: Proprietary

Distributor's Name:

Distributor's Address:

Distributor's Phone #:

SECTION 2-INGREDIENT INFORMATION

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Water	7732-18-5	to 100			
Hydrochloric Acid	7647-01-0	24 min	5 ppm	5 ppm	N/A
Nonionic Surfactant	9016-45-9	0 to 5			
Benzalkonium Chloride	68424-85-1	0 to 5			

SECTION 3-PHYSICAL DATA

Boiling Point (°F): 205 F.

Specific Gravity: 1.175

Vapor Pressure: 33mm Hg @ 68 F.

Vapor Density (Air=1): >1

% Volatile: 90+

pH: 0.5-1.0

Solubility in Water: Complete

Evaporation Rate (Water=1): <1

Physical Description: Thin white opaque liquid with pleasant odor.

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Upper Explosion Limit: N/A

Lower Explosion Limit: N/A

Extinguishing Media: N/A

Special Firefighting Procedures: Non Flammable

Unusual Fire and Explosion Hazards: N/A

SECTION 5-REACTIVITY DATA

Stability: Stable

Hazards Decomposition Products: Hydrogen gas formed on contact with metals. HCL vapors emitted when heated. Chlorine gas may form by electrolysis or oxidation.

Hazardous Polymerization: None

Incompatibility (Materials to Avoid): Corrosive to many materials. Strong alkalis or oxidizers, bleaching agents, amines and carbonates. Contact with metals, metal oxides, soft metals and iron may generate hydrogen gas.

SECTION 6-STORAGE AND HANDLING INFORMATION

DANGER! POISON. ACID Corrosive. Causes chemical burns to eyes and skin. Harmful if inhaled. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Avoid breathing of vapors. Wear rubber gloves and protective eyewear when handling. Keep out of reach of children. For use by trained personnel only. Do not mix with alkali cleaners, oxidizers or other cleaning products. Keep container closed during storage. For institutional and industrial use only. Wash hands after each use. Use in well-ventilated area only. Avoid contact with aluminum, brass, iron and strong alkaline cleaners or bleaches

SECTION 7-HEALTH HAZARDS AND FIRST AID

Effects of Overexposure:

Skin: Severe skin irritant. Prolonged or repeated contact will cause permanent chemical burns.

Eyes: Severe eye irritant. Liquid and mists will burn or injure eyes, causing permanent corneal damage.

Inhalation: Strong irritant to mucous membranes of the nose, throat, and lungs. Vapors may cause choking, burning sensation of throat and lungs, leading to irreversible damage. May be fatal. Chronic exposure may damage teeth.

Ingestion: POISON Irritating and corrosive to the mouth and throat on immediate contact. May be fatal. Cause severe ulceration of mucous membranes.

First Aid Procedures:

Skin: Immediately remove contaminated clothing. Flush exposed area with large quantities of water followed by washing with mild soap. Seek medical attention immediately.

Eyes: Immediately flush with large quantities of water for at least 15 minutes, holding eyelids open. Seek medical attention immediately.

Inhalation: Get to fresh air. Seek medical attention immediately.

Ingestion: Do not induce vomiting. Drink large quantities of water. Seek medical attention immediately.

SECTION 8-SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH approved acid-gas air purifying canister when used in confines or poorly ventilated areas

Ventilation Requirements: Provide mechanical exhaust to keep TLV of Section 2 ingredient (Hydrochloric Acid) below acceptable limit.

Protective Gloves: Full arm length acid proof, rubber, or neoprene.

Eye Protection: Chemical splash goggles or full-face safety shield.

Other Protective Equipment: Eyewash station should be made available near site where used. Chemical resistant apron should be worn when danger of splash contact will occur.

SECTION 9-SPILL OR LEAK PROCEDURES

Steps to be taken in Case Material is Released or Spilled: Immediately evacuate all unessential personnel from area. Ventilate area well. Acquire special protection equipment as noted in Section 8. Absorb spill with inert material. Neutralize with soda ash or lime. Avoid discharge to sewer or open waterways.

Waste Disposal Method: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If disposed of in its purchased form, this product has the RCRA characteristic of corrosivity and would have an EPA Hazardous waste number of D002. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

SECTION 10-REGULATORY INFORMATION

SARA Title III - Section 311/312 -Hazard Categories:

No - Fire Hazard

No - Sudden Release of Pressure Hazard

No - Reactivity Hazard

Yes - Immediate (acute) Health Hazard

No - Delayed (chronic) Health Hazard

Shipping Information:

FOR CONTAINERS > 1 Gallon: Compounds, cleaning liquid, (hydrochloric acid), 8, NA-1760, PG II

FOR 1 GALLON CONTAINERS: Compounds, cleaning liquid, (hydrochloric acid), 8, NA-1760, PG II

FOR CONTAINERS < 1 GALLON: ORM-D

HMIS Hazardous Materials Identification System

Health	3
Flammability	0
Reactivity	0
Personal Protection	C

FOR EMERGENCY MEDICAL OR TRANSPORT INFORMATION: CHEM-TEL, Inc. @ 800-255-3924 (24 hours, 7 days per week)

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS#	Chemical Name	Percent by Weight
Exempt	None	

This product contains the following chemical(s) which have been established to be either a carcinogen or suspected carcinogen.

CAS#	Chemical Name	Percent by Weight
	None	

SECTION 11-OTHER INFORMATION

This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of our products either alone or in combination with other products. It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. This company will accept no liability for damages or loss incurred from the improper handling and use of this product